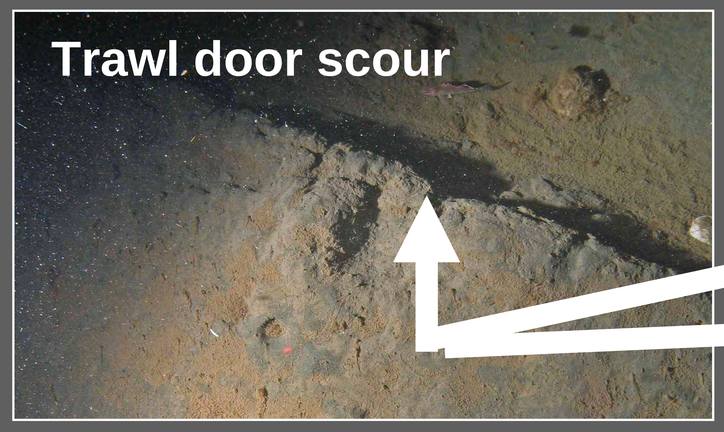
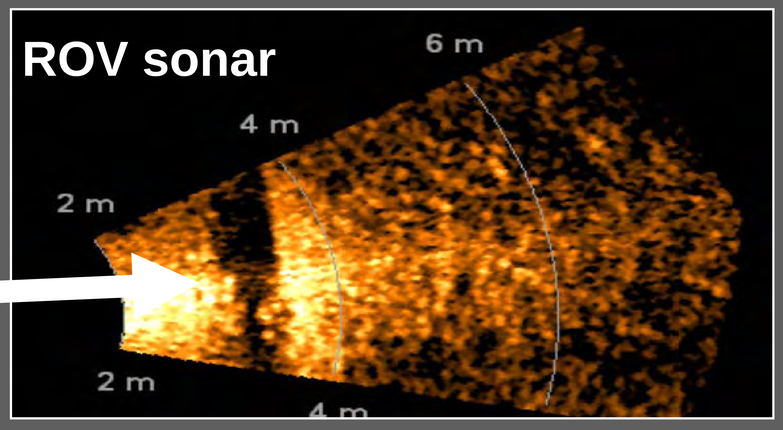
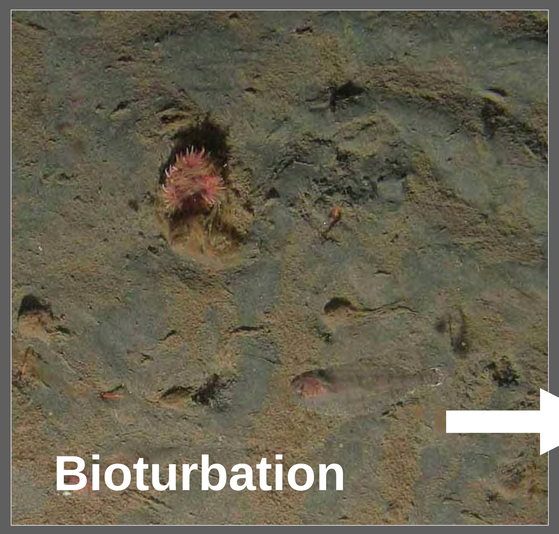
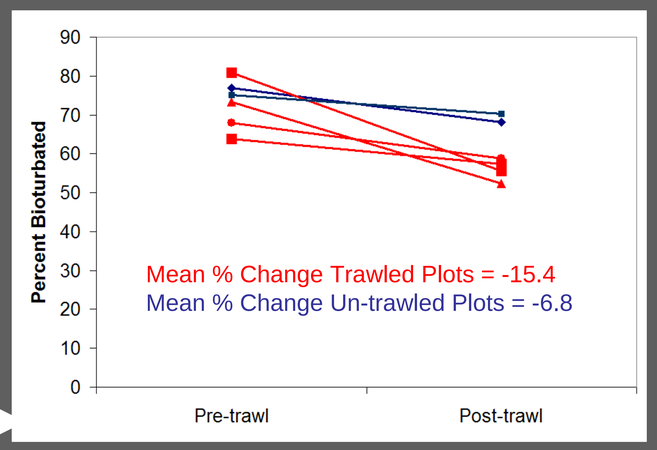
Bottom trawling impacts the seafloor of central California…



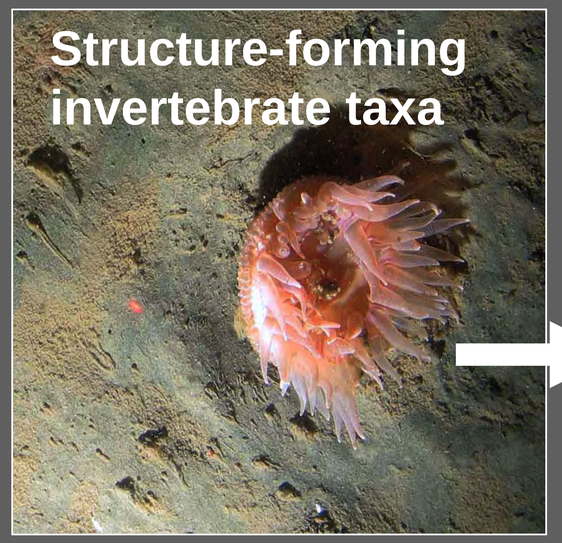


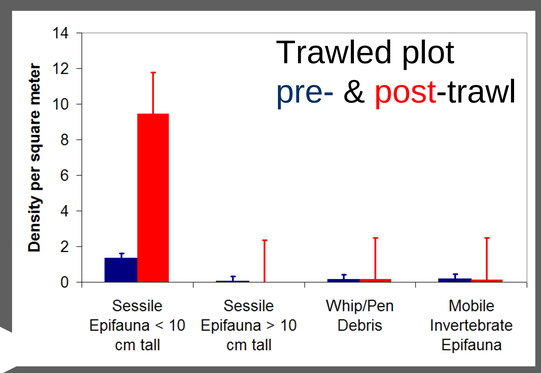
…and can alter the habitat attributes used by demersal fishes.





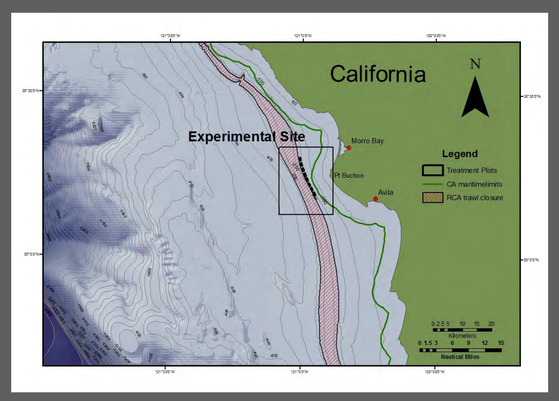
Visible bioturbation declined by 15% in trawled areas two weeks post-trawling.



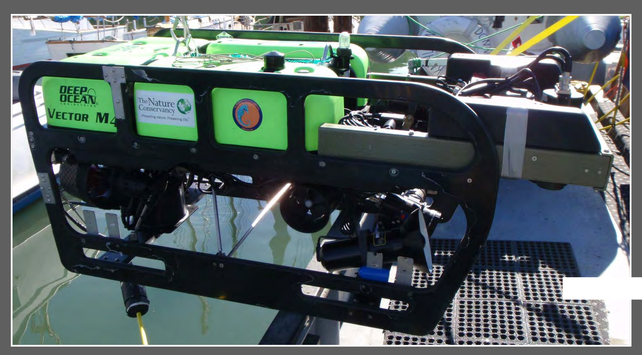


PRELIMINARY analyses of ONE trawled plot suggest little change in the density of structure-forming invertebrate organisms.

How do we know this?



The goal of this 5-year study is to quantify the recovery of seafloor habitats and associated taxa and to inform best management practices for bottom trawling.



Video and still photographic imagery are collected by an ROV in trawled and un-trawled study plots. In 2009 the entirety of each trawled plot was trawled twice. In 2010 each plot will be trawled five times. ROV sampling occurs at 2 weeks, 6 months, and 1 year post-trawling and is accompanied by infaunal sampling.

This collaborative research effort involves key staff and resources from TNC, IfAME-CSUMB, MARE, NMFS, MBNMS, and is being conducted in close association with the commercial fishing industry. All trawling and infaunal surveys, and selected ROV surveys are conducted from fishing vessels.

IfAME
Institute for Applied Marine Ecology

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Protecting nature. Preserving life.™

RECOVERY TRAJECTORIES IN SEAFLOOR COMMUNITIES IMPACTED BY TRAWLING ALONG THE CENTRAL COAST OF CALIFORNIA

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2 - The Nature Conservancy

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CSUMB Undergraduate Research Opportunities Center
Monterey Bay National Marine Sanctuary
Marine Applied Research and Exploration